

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY**

IOTTIE INC. and HSM CO., LTD.,

Plaintiffs,

vs.

MERKURY INNOVATIONS,

Defendant.

Civ. No. 2:15-cv-6597-KM-JBC

OPINION

KEVIN MCNULTY, U.S.D.J.:

Plaintiffs iOttie Inc. (“iOttie”) and HSM Co., Ltd. (“HSM”) assert that defendant Merkury Innovations has infringed and continues to infringe one or more claims of United States Patent No. 8,627,953 (“the ’953 Patent”). The ’953 Patent relates to a “holder for a portable device”—i.e., a cell-phone holder or mount that can be used with cell phones of various sizes. (Compl. ¶ 11);¹ (Def.

¹ Citations to the record are abbreviated as follows:

“Compl.” = Complaint (ECF no. 1)

“’953 Patent” = United States Patent No. 8,627,953 (ECF no. 1-1)

“Def. Br.” = Defendant Merkury’s Memorandum of Law in Support of its Motion for Summary Judgment of Non-Infringement (ECF no. 65-1)

“DSMF” = Defendant’s Rule 56.1 Statement in Support of its Motion for Summary Judgment of Non-Infringement (ECF no. 65-2)

“Mandaro Decl.” = Declaration of Richard Mandaro in Support of Merkury Innovations, LLC’s Motion for Summary Judgment of Non-Infringement (ECF no. 65-3)

“Pl. Br.” = Plaintiffs’ Opposition to Defendant’s Motion for Summary Judgment of Non-Infringement (ECF no. 68)

“PSMF” = Plaintiffs’ L. Civ. R. 56.1 Response to Defendant’s Rule 56.1 Statement in Support of its Motion for Summary Judgment of Non-Infringement and Supplemental Statement of Additional Material Facts (ECF no. 68-1)

Br. 1); ('953 Patent 1:33-40). Defendant Merkury now moves for summary judgment of non-infringement. (Def. Br.).

I. BACKGROUND

A. Factual History²

Plaintiff HSM, a South Korean corporation, owns the '953 Patent, which is for a portable device holder. (Compl. ¶¶ 3, 13). HSM has granted plaintiff iOttie, a New York corporation, the exclusive right to sell, re-sell, and distribute the products under iOttie's brand name. (Compl. ¶¶ 4, 14). These holders can be used for many purposes, such as mounting a cell phone on a car windshield or dashboard. ('953 Patent 1:26-32). It is adjustable and can be used with different-sized devices. ('953 Patent 1:33-40). Figures 1 and 2 illustrate the patent-at-issue:³

Figure 1

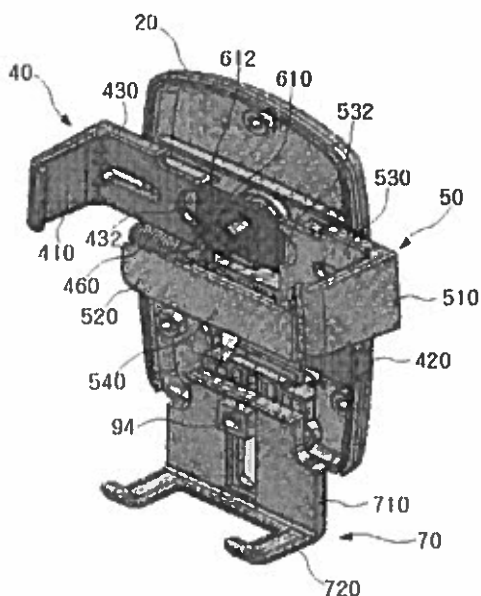
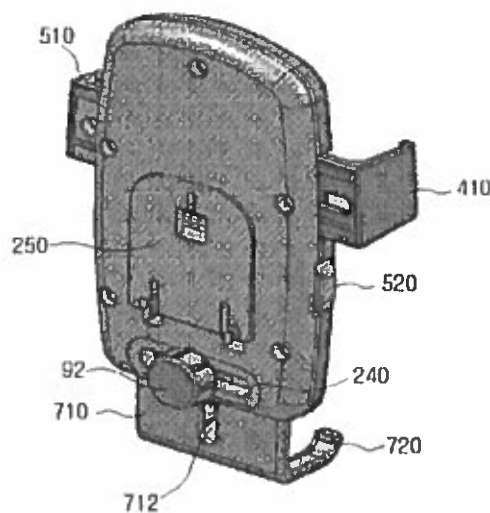


Figure 2



"AJCC" = Amended Joint Claim Construction and Prehearing Statement (ECF no. 87)

² At the summary judgment stage, all facts are construed in favor of the nonmoving party.

³ Figures 1 and 2 (shown above) are figures 4 and 6 from the '953 patent.

('953 Patent fig.4, fig.6).

Plaintiffs' device has three brackets that are used to secure a portable device: brackets 410 and 510 can be moved inward and outward; bracket 70 can be moved vertically or laterally. ('953 Patent 1:49-67, 2:51-64, 5:27-35). Bracket 70 is the bottom bracket, which is fixed to the main body through knob 92 and nut 95. ('953 Patent 3:24-34, 3:63-67). Bracket 70 may be moved or fixed depending on whether knob 92 is open or closed. ('953 Patent 3:66-67). Claim 1 states, in part, that the device comprises "a hole formed at the bottom of the rear cover and coupled to a knob for fixing or moving a bracket" ('953 Patent 7:15-16).

The '953 Patent was originally filed in South Korea and then as an international patent pursuant to the Patent Cooperation Treaty. ('953 Patent 1:6-11). Under the Patent Cooperation Treaty, an applicant files an "international application" in any of the contracting states and that application is recognized as a national patent application in as many contracting states as the applicant elects to designate. Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231. The international application is forwarded to one of the major patent offices throughout the world, such as the US Patent and Trademark Office ("the PTO"), Korean Patent Office, European Patent Office, etc. *Id.* That patent office completes the prior art search and issues an opinion about whether the patent application has satisfied the criteria for patentability. See U.S. Patent & Trademark Office, U.S. Dep't of Commerce, Manual of Patent Examining Procedure §§ 708.02(a), 709(I)(c) (8th ed., 7th rev. 2008). This search and opinion provide the basis for an international preliminary examination report, which is sent to the patent offices of all the countries selected by the application. *Id.* § 1801. See Michael Abramowicz & John F. Duffy, *Ending the Patent Monopoly*, 157 U. Pa. L. Rev. 1541, 1567-68 (2009).

This patent was filed as Korean Patent Application No. 10-2011-0024222 on March 18, 2018 in the Korean Intellectual Property Office. ('953 Patent 1:6-

11). It was then filed under the Patent Cooperation Treaty as International Application No. PCT/KR2011/004668 on June 27, 2011. (*Id.*). The international application was in Korean and designated the United States as the country in which the patent was sought. (*Id.*).

The originally filed claim 1 for the international application designated for the United States was as follows:

1. A holder for a portable device, comprising:
 - a main body having the portable device received on a front surface portion thereof;
 - a first switch formed at a designated position on the front surface portion of the main body so as to be push into and protruded from the front surface portion;
 - first and second arms formed at both side surfaces of the main body, and having a distance provided therebetween and varied by the first switch such that the portable device is attached or detached; and
 - a second switch comprising a first button formed to be physically connected to the first arm inside the main body and a second button formed to be physically connected to the second arm inside the main body, and varying the distance between the first and second arms.

(Mandaro Decl. Ex. 3, '953 Patent File History at 1, 11); (PSMF ¶ 22). Claim 10 of the Korean application provided:

10. The holder according to the claim 9, wherein the rear cover comprises:
 - a housing unit comprising an upper housing unit having the switch assembling hole formed in the center thereof and a lower housing unit formed adjacent to the bottom of the upper housing unit; and
 - a hole formed at the bottom of the rear cover and coupled to a knob for fixing or moving the bracket.

(Mandaro Decl. Ex. 3, '953 Patent File History at 3); (Pl. Br. 10).

The Korean Patent Office rejected the application twice, stating that “a person skilled in the art would have easily invented claims 1 to 10 and 19 to 23

before filing the present application.” (PSMF ¶ 26); (DSMF ¶ 26); (Mandaro Decl. ¶¶ 14-15). Plaintiffs then amended their application to add, among other things, the “knob” and “hole” features of the originally filed claim 10 into claim 1. (Pl. Br. 9-10).

Korea and the United States participate in the Patent Prosecution Highway (“PPH”), which speeds up the examination process when corresponding applications are submitted in participating countries. (PSMF ¶ 29); (DSMF ¶ 29). Under the PPH program, if at least one of a patent applicant’s claims is allowed, the applicant can file a request to accelerate examination of a corresponding application that is pending in another participating country’s patent office. (PSMF ¶ 30); (DSMF ¶ 30). Plaintiffs took advantage of the PPH and made a request for accelerated examination in the United States. (PSMF ¶ 31); (DSMF ¶ 31). Plaintiffs amended the claims of their PTO application to correspond to the Korean application and submitted a document confirming that the U.S. PTO claims are “substantially corresponding” to the Korean Claims. (PSMF ¶ 33); (DSMF ¶ 33); (Mandaro Decl. ¶ 22).

On September 19, 2013, plaintiffs’ request to participate in the PPH was granted. (PSMF ¶ 35); (DSMF ¶ 35); (Mandaro Decl. ¶ 24). The ’953 patent was approved in the United States on January 14, 2014. (’953 Patent). Claim 1 of the patent, which is at the center of this dispute, provides:

1. A holder for a portable device, comprising:
 - a main body having the portable device received on a front surface portion thereof;
 - a first switch formed at a designated position of the front surface portion of the main body so as to be pushed into and protruded from the front surface portion;
 - first and second arms formed at both side surfaces of the main body, and having a distance provided therebetween and varied by the first switch such that the portable device is attached or detached;
 - a second switch comprising a first button formed to be physically connected to the first arm inside the main body and a second

button formed to be physically connected to the second arm inside the main body, and for varying the distance between the first and second arms;

wherein the main body comprises:

- a front cover having a switch through-hole through which the first switch is pushed and protruded, and
- a rear cover having a switch assembling hole formed at a position corresponding to the switch through-hole, and formed to be coupled to the front cover;

wherein the rear cover comprises:

- a housing unit comprising an upper housing unit having the switch assembling hole formed in the center thereof and a lower housing unit formed adjacent to the bottom of the upper housing unit, and
- a hole formed at the bottom of the rear cover and coupled to a knob for fixing or moving a bracket; and*

a first attach/detach control unit comprises:

- a first arm moving shaft having one side extended perpendicular from the first arm, housed in one side of the upper housing unit, and having a first switch coupling groove formed at an end of the other side thereof so as to be coupled to the first switch;
- a first button moving shaft formed at a position spaced at a designated distance in a direction perpendicular to the extension direction of the first arm moving shaft, extended in the same direction as the extension direction of the first arm moving shaft, and housed in the other side of the lower housing unit,
- a first button formed at an end of one side of the first button moving shaft, which faces the side to which the first button moving shaft and the first moving shaft are connected, and
- a first elastic member formed to a designated length in a formation direction of the first arm moving shaft from an end of the other side of the first button moving shaft, and coupled to a first elastic member.

('953 Patent 6:56-7:36) (emphasis added).

B. Procedural History

Plaintiffs assert that Merkury incorporates the technology claimed in the '953 Patent for its own products and that Merkury therefore infringes. (Compl. ¶ 16). Figures 3 and 4 illustrate an example of Merkury's product, which is also marketed as a portable device holder:⁴

Figure 3

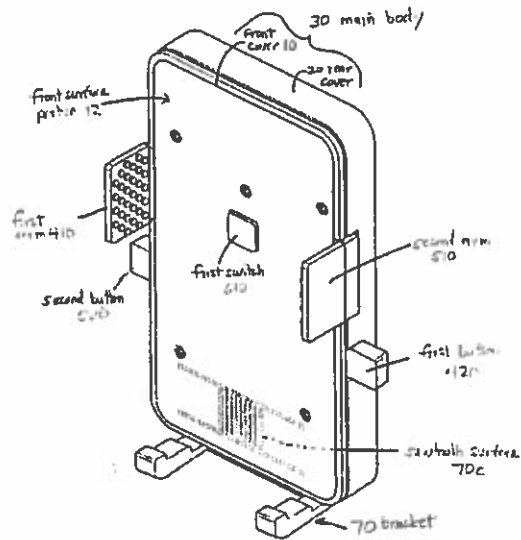
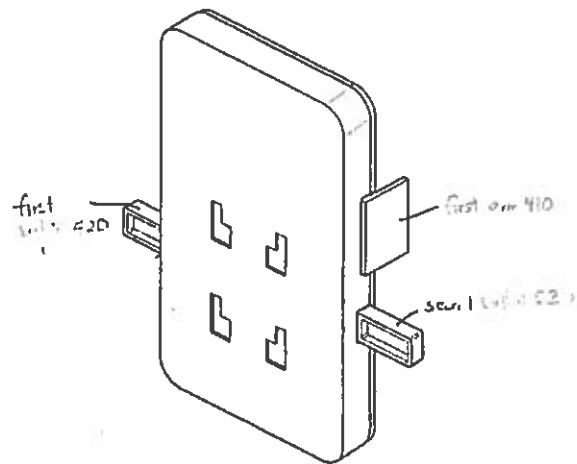


Figure 4



On September 2, 2015, plaintiffs asserted three counts against Merkury:

- Count I: Direct Infringement of the '953 Patent under 35 U.S.C. § 271(a) (Compl. ¶¶ 19-29)
- Count II: Contributory Infringement of the '953 Patent under 35 U.S.C. § 271(c) (Compl. ¶¶ 30-39)
- Count III: Active Inducement of Infringement of the '953 Patent under 35 U.S.C. § 271(b) (Compl. ¶¶ 40-48)

On June 23, 2017, Merkury filed a motion for summary judgment of non-infringement. (ECF no. 65). Merkury argues that its product (A) does not have a knob and hole for “moving” or “fixing” its bottom support bracket and (B) is not sold with a “portable device.” (Def. Br. 1-2). According to Merkury, since its

⁴ Figures 3 and 4 are figures 2 and 6 from exhibit 5 of the Mandaro Declaration.

product has neither of these characteristics, either literally or under the doctrine of equivalents, it does not infringe the '953 Patent. (*Id.*).

II. LEGAL STANDARDS

A. Summary Judgment

Federal Rule of Civil Procedure 56(a) provides that summary judgment should be granted “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986); *Kreschollek v. S. Stevedoring Co.*, 223 F.3d 202, 204 (3d Cir. 2000). In deciding a motion for summary judgment, a Court must construe all facts and inferences in the light most favorable to the nonmoving party. *See Boyle v. County of Allegheny Pennsylvania*, 139 F.3d 386, 393 (3d Cir. 1998). The moving party bears the burden of establishing that no genuine issue of material fact remains. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). “[W]ith respect to an issue on which the nonmoving party bears the burden of proof ... the burden on the moving party may be discharged by ‘showing’—that is, pointing out to the district court—that there is an absence of evidence to support the nonmoving party’s case.” *Id.* at 325.

Once the moving party has met that threshold burden, the non-moving party “must do more than simply show that there is some metaphysical doubt as to material facts.” *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986); *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 955 (Fed. Cir. 1997) (citing *Celotex*, 477 U.S. at 323). The opposing party must present actual evidence that creates a genuine issue as to a material fact for trial. *Anderson*, 477 U.S. at 248; *see also* Fed. R. Civ. P. 56(c) (setting forth types of evidence on which nonmoving party must rely to support its assertion that genuine issues of material fact exist). “[U]nsupported allegations ... and pleadings are insufficient to repel summary judgment.” *Schoch v. First Fid. Bancorporation*, 912 F.2d 654, 657 (3d Cir. 1990); *see also Gleason v. Norwest Mortg., Inc.*, 243 F.3d 130, 138 (3d Cir. 2001) (“A nonmoving party has created

a genuine issue of material fact if it has provided sufficient evidence to allow a jury to find in its favor at trial.”). If the nonmoving party has failed “to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial, ... there can be ‘no genuine issue of material fact,’ since a complete failure of proof concerning an essential element of the nonmoving party’s case necessarily renders all other facts immaterial.” *Katz v. Aetna Cas. & Sur. Co.*, 972 F.2d 53, 55 (3d Cir. 1992) (quoting *Celotex*, 477 U.S. at 322-23).

In deciding a motion for summary judgment, the Court’s role is not to evaluate the evidence and decide the truth of the matter, but to determine whether there is a genuine issue for trial. *Anderson*, 477 U.S. at 249. Credibility determinations are the province of the fact finder. *Big Apple BMW, Inc. v. BMW of N. Am., Inc.*, 974 F.2d 1358, 1363 (3d Cir.1992).

The summary judgment standard, however, does not operate in a vacuum. “[I]n ruling on a motion for summary judgment, the judge must view the evidence presented through the prism of the substantive evidentiary burden.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 254 (1986).

B. Infringement

A patent infringement analysis involves two steps: First, the court determines the scope and meaning of the asserted claims as a question of law. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372-74 (1996); *see MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1329 (Fed. Cir. 2007) (“A determination of patent infringement requires a two-step analysis: first, the meaning of the claim language is construed, then the facts are applied to determine if the accused device falls within the scope of the claims as interpreted.”). Claim construction is a matter of law determined by the district judge. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1337 (Fed. Cir. 2015); *see Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977 (Fed. Cir. 1995) (holding that claim construction is “a matter of law exclusively for the court”).

Second, the properly construed claims are compared to the allegedly infringing product. *See PC Connector Sols. LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1362 (Fed. Cir. 2005). That second step involves a factual determination. *See id.* at 1364.

i. Claim Construction

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. In order to obtain a patent, the inventor must submit a written application providing (1) “a specification as prescribed by [section] 112”; (2) “a drawing as prescribed by section 113”; and (3) “an oath or declaration as prescribed by section 115.” 35 U.S.C. § 111.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

Id. § 112(a).

The patent’s “claims” round out the specification by “particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.” *Id.* § 112(b).

The function of claims is (a) to point out what the invention is in such a way as to distinguish it from what was previously known, i.e., from the prior art; and (b) to define the *scope of protection* afforded by the patent. In both of those aspects, claims are not technical descriptions of the disclosed inventions but are legal documents like the descriptions of lands by metes and bounds in a deed which *define the area* conveyed but *do not describe the land*.

In re Vamco Mach. & Tool, Inc., 752 F.2d 1564, 1577 n.5 (Fed. Cir. 1985).

A fundamental principle of claim construction is that patent claims must have the same meaning to all persons at all times, and that the meanings of the claims are determined and fixed at the time the [PTO] issued the patent. The purpose of a *Markman* hearing is for the court and the parties to settle conclusively on the interpretation of disputed claims. Indeed, the need for uniformity of claim construction and concerns about fairness to competitors inform the policy of reserving the claim construction function to the trial judge.

Novartis Corp. v. Teva Pharm. USA, Inc., 565 F. Supp. 2d 595, 603 (D.N.J. 2008) (internal citations omitted). “When a court construes the claims of the patent, it is as if the construction fixed by the court had been incorporated in the specification, and in this way the court is defining the federal legal rights created by the patent document.” *Markman*, 52 F.3d at 978 (internal quotations and citation omitted).

When construing claims, a district court should give the claim terms their “ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “Ordinary and customary meaning” however, is not limited to the understanding of the average person. Rather, it must be assessed from the standpoint of a hypothetical “person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1313. (That hypothetical person is sometimes clumsily abbreviated as a “PHOSITA”.)

[The] objective baseline from which to begin claim interpretation ... is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.... Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.

Id. (internal citations omitted); *see also Novartis Corp.*, 565 F. Supp. 2d at 604 (“Although an invention is defined by a patent’s claims, they do not stand alone. Instead, claims are part of a fully integrated written instrument consisting principally of a written description of the invention, often referred to as the specification, and concluding with the claims. For that reason, claims must be read in view of the specification, of which they are a part.” (internal quotations and citations omitted)).

In some cases, the meaning of claim terms as understood by a PHOSITA may be readily apparent, “even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. In other cases, however, the meaning is not so easily ascertained, and the court must look to the “sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.” *MBO Labs*, 474 F.3d at 1329 (quoting *Phillips*, 415 F.3d at 1314). “Those sources include ‘the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” *Phillips*, 415 F.3d at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

Those sources are not necessarily weighted equally; there is a hierarchy of relevance. Generally, the patent’s “intrinsic evidence in the record, i.e., ‘the patent itself, including the claims, the specification and, if in evidence, the prosecution history’ ... is the ‘most significant source of the legally operative meaning of disputed claim language.’” *Novartis*, 565 F. Supp. 2d at 603-04 (quoting *Vitronics Corp.*, 90 F.3d at 1582).

The patent’s specification, “the single best guide to the meaning of a disputed term,” should be consulted first. *Phillips*, 415 F.3d at 1317 (citing *Vitronics*, 90 F.3d at 1582). The specification may reveal “whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The

specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.” *Novartis*, 565 F. Supp. 2d at 604 (quoting *Vitronics*, 90 F.3d at 1582). After consulting the specification, the court should review the patent’s prosecution history, which also is “part of the ‘intrinsic evidence’ that directly reflects how the patentee has characterized the invention.” *MBO Labs., Inc.*, 474 F.3d at 1329. The prosecution history includes statements made by the patentee during reexamination. See *Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1266 (Fed. Cir. 2012) (“A patentee’s statements during reexamination can be considered during claim construction, in keeping with the doctrine of prosecution disclaimer” (citation omitted)). Finally, if the specification and the patent’s intrinsic evidence do not clarify the claim terms, the court may consult “extrinsic evidence”—testimony, dictionaries, learned treatises or other materials not part of the public record. See *Phillips*, 415 F.3d at 1317.

ii. Claim Comparison

Infringement requires that the accused product include “every limitation in the asserted claims”; there is no infringement “[i]f even one limitation is missing [from the accused product] or not met as claimed.” *Mas-Hamilton Grp. v. LaGard, Inc.*, 156 F.3d 1206, 1211 (Fed. Cir. 1998); see also *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997). As to infringement, the ultimate burden of proof is on the patentee. *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 134 S. Ct. 843, 849 (2014); *Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001).

“A patentee may prove infringement by any method of analysis that is probative of the fact of infringement, and circumstantial evidence may be sufficient.” *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1372 (Fed. Cir. 2009) (internal citations and quotations omitted); see also *Liquid Dynamics Corp v. Vaughan Co.*, 449 F.3d 1209, 1219 (Fed. Cir. 2006) (“A patentee may prove direct infringement or inducement of infringement by either direct or circumstantial evidence.”).

III. DISCUSSION

The two-step patent infringement analysis is generally completed at two separate stages with different motions. First, the court determines the scope and meaning of the asserted claims as a question of law. Second, the properly construed claims are compared to the allegedly infringing product. In a proper case, the court may resolve both without trial, employing a summary judgment standard. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1320 (Fed. Cir. 2012) (quoting *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1578 (Fed. Cir. 1996)); *see also Mich & Mich. TGR, Inc. v. Brazabra, Corp.*, 128 F. Supp. 3d 621, 627 (E.D.N.Y. 2015); *In re Gabapentin Patent Litig.*, 393 F. Supp. 2d 278, 288 (D.N.J. 2005); *Plastpro, Inc. v. Therma-Tru Corp.*, 378 F. Supp. 2d 519, 525 (D.N.J. 2005); *Clarence J. Venne, Inc. v. Stuart Entm't*, No. 98-cv-2943, 2000 WL 12692 (E.D. Pa. Jan. 3, 2000). I find that this is such a case.

Merkury argues that its product (A) does not have a knob and hole for “moving” or “fixing” its bottom support bracket and (B) is not sold with a “portable device.” (Def. Br. 1-2). Because its product has neither of these characteristics, either literally or under the doctrine of equivalents, it does not infringe the '953 patent, in Merkury's view. (*Id.*). I will discuss arguments A and B separately.

A. Knob and Hole “for fixing or moving”

i. Claim Construction

The first stage of the patent-infringement analysis is to properly construe the claims. The parties disagree on the proper construction of the term “for fixing and moving” in claim 1. That phrase appears in claim 1 of the patent-at-issue:

a hole formed at the bottom of the rear cover and coupled to a
knob for fixing or moving a bracket
(’953 Patent 7:15-16).

Merkury argues that the term “for fixing or moving” should be construed as “for fastening into place or allowing to be moved.” (AJCC 4).

Merkury argues that this is the “plain and ordinary meaning” of the term, (AJCC 4), and submits several pieces of intrinsic evidence to support its position. Merkury identifies three references from the “Description of Specific Embodiments.” First, “[a]fter the portable device 3 is fixed by the first and second arms 410 and 510, the bracket 70 may be moved upward, and knob 92 may be tightened to further stably maintain the fixed state of the portable device 3.” (’953 Patent 6:7-10). Second, “[f]urthermore, since the bracket 70 is formed to move left and right and/or up and down, various types of portable devices may be held regardless of the lengths of the portable devices.” (’953 Patent 6:18-21). Third, “[f]urthermore, the rear cover 20 has a hole 240 formed at the bottom thereof and coupled to a knob 92 for fixing or moving the bracket 70. The knob 92 forms a pair with a nut 94. Depending on the open or close state of the knob 92, the bracket 70 may be moved or fixed.” (’953 Patent 3:63-67). Merkury claims that these statements describe the knob as “fastening” or “fixing” the lower bracket into place when closed, or permitting movement when open.

Additionally, Merkury asks the court to consider the Oxford Living Dictionaries Online definition for “fixing” as extrinsic evidence. (AJCC 5). That dictionary’s first definition of “fixing” is “The action of fastening something in place.” Fixing, English: Oxford Living Dictionaries, <https://en.oxforddictionaries.com/definition/fixing> (last visited Dec. 12, 2017).

Plaintiffs dispute this claim construction. They argue that “for fixing or moving” in claim 1 should be construed as follows:

[A] knob and hole (or structure which is an *insubstantial change* from a knob and hole) which provides for *fixing* a bracket in place if force applied is not sufficient to overcome friction sufficient to overcome friction force holding the bracket, and which also enables *moving* a bracket if the force applied is sufficient to overcome friction force holding the bracket.

(AJCC 4). As intrinsic evidence, Plaintiff relies on the following language from the “Description of Specific Embodiments”:

Furthermore, the rear cover 20 has a hole 240 formed at the bottom thereof and coupled to a knob 92 *for fixing or moving* the bracket 70 [relative to the rear cover]. The knob 92 forms a pair with a nut 94. Depending on the open or close state of the knob 92, the bracket may *be moved or fixed*.

(’953 Patent 3:63-67) (emphasis added) (bracketed material inserted); (AJCC 4).

As discussed above, claim construction primarily involves giving claim terms their “ordinary and customary meaning” from the standpoint of a PHOSITA. *See also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). A court relies significantly on intrinsic evidence, such as the language in the patent-at-issue. *See Novartis Corp. v. Teva Pharmaceuticals USA, Inc.*, 565 F. Supp. 2d 595, 604 (D.N.J. 2008).

Plaintiffs’ proposed claim construction does not seem to arise from any “ordinary and customary meaning” of the phrase “for fixing or moving” and it does not appear to arise from the language in the patent-at-issue. Plaintiffs seek to insert language about “friction” in the phrase “for fixing or moving.” (AJCC 4). However, the term “friction” does not appear in the ’953 patent. Plaintiffs have not identified evidence to suggest why “fixing or moving” involves “friction” between different parts of the patented device. (More about that later in the infringement discussion.)

Merkury’s proposed construction of “for fixing or moving” to mean “for fastening into place or allowing to be moved,” is consistent with both the language of the patent and the plain and ordinary meaning of the words. I therefore accept Merkury’s construction.

ii. Claim Comparison

Merkury argues that its product does not literally infringe and that plaintiffs are estopped from asserting the doctrine of equivalents. (Def. Br. 14-18). Plaintiffs do not address literal infringement in their responding brief. Rather, plaintiffs contend that Merkury is liable for infringement under the doctrine of equivalents, even under Merkury’s proposed claim construction

language. (AJCC 6).

1. Literal infringement

Merkury's accused product does not literally infringe. Literal infringement "exists when every limitation recited in the claim is found in the accused device." *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1340 (Fed. Cir. 2016). There is no literal infringement "[i]f even one limitation is missing [from the accused product] or not met as claimed." *Mas-Hamilton Grp. v. LaGard, Inc.*, 156 F.3d 1206, 1211 (Fed. Cir. 1998); *see also Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997).

In this case, the claim language is clear: Plaintiffs' product has a knob and a hole; Merkury's product does not. While comparison of the accused product with the patented product is a question of fact, no reasonable juror could find that Merkury's product contains the knob and hole configuration provided for in the '953 patent. Merkury's product thus does not literally infringe upon plaintiffs' patent-at-issue, and plaintiffs do not really contend otherwise.

Employing a summary judgment standard, I find that there is no literal infringement. I will next consider whether prosecution history estoppel bars plaintiffs from asserting the doctrine of equivalents.

2. Prosecution History Estoppel

Prosecution history estoppel may prevent a patent holder from asserting the doctrine of equivalents. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722 (2002). It is a "rule of patent construction" that ensures that claims are interpreted by reference to those "that have been cancelled or rejected." *Id.* (citing *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 220-21 (1940)). The Supreme Court described how patent history estoppel applies in *Festo Corp.*:

The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial

changes. When, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent. On the contrary, “[b]y the amendment [the patentee] recognized and emphasized the difference between the two phrases[,] ... and [t]he difference which [the patentee] thus disclaimed must be regarded as material.”

A rejection indicates that the patent examiner does not believe the original claim could be patented. While the patentee has the right to appeal, his decision to forgo an appeal and submit an amended claim is taken as a concession that the invention as patented does not reach as far as the original claim. Were it otherwise, the inventor might avoid the PTO’s gatekeeping role and seek to recapture in an infringement action the very subject matter surrendered as a condition of receiving the patent.

Id. at 733-35 (internal citations omitted).

There is a presumption that prosecution history estoppel applies when a patent is rejected and then modified by the patentee. *Id.*; see also *Energy Transp. Group, Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1359 (Fed. Cir. 2012). In this way, prosecution history estoppel “preclude[es] a patentee from regaining, through litigation, coverage of subject matter relinquished during prosecution of the application for the patent.” *Wang Labs, Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1577-78 (Fed. Cir. 1997). However, a patentee may overcome this presumption in limited circumstances:

The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question. In those cases the patentee can overcome the presumption that prosecution history estoppel bars a finding of equivalence.

Festo Corp., 535 U.S. at 740-41.

In this case, the plaintiffs' patent was denied twice by the Korean Patent Office, which stated that "a person skilled in the art would have easily invented claims 1 to 10 and 19 to 23 before filing the present application." (PSMF ¶ 26); (DSMF ¶ 26); (Mandaro Decl. ¶¶ 14-15). Plaintiffs then amended their application to add, among other things, the "knob" and "hole" features of the originally filed claim 10 into claim 1. (Pl. Br. 9-10). Since claim 1 was amended, Merkury argues that prosecution history estoppel bars the doctrine of equivalents. Plaintiffs argue that the equivalent (a) was not foreseeable, (b) the claim amendments bear no more than a tangential relation to the equivalent in question and are not substantially related to patentability, and (c) the claim amendments were made to take advantage of the PPH and therefore are unrelated to patentability.

Determining whether prosecution history estoppel applies in this case would present questions of fact not appropriate for resolution on this record and at the summary judgment stage. Because I cannot resolve the estoppel issue, I will assume *arguendo* that plaintiffs are not estopped, and consider whether Merkury's device would infringe under the doctrine of equivalents.

3. The Doctrine of Equivalents

Even if I assume that Plaintiffs are not estopped from asserting the doctrine of equivalents, Merkury has established non-infringement. I reach that conclusion because Merkury's sawtooth and spring flap assembly is not the "substantial equivalent" of the "knob and hole" configuration used for "fixing or moving" the lower bracket.

Literal infringement is of course a very narrow doctrine, as discussed above. "The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes." *Festo Corp.*, 535 U.S. at 733.

[C]ourts have ... recognized that to permit imitation of a patented invention which does not copy every literal detail would be to

convert the protection of the patent grant into a hollow and useless thing. Such a limitation would leave room for—indeed encourage—the unscrupulous copyist to make unimportant and insubstantial changes and substitutions in the patent which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of law.

Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 607 (1950).

There is a debate regarding “the linguistic framework under which ‘equivalence’ is determined.” *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 (1997). The parties here address both the “insubstantial differences” approach and the “function-way-result” approach. The function-way-result test has generally been found suitable for analyzing mechanical devices like this one; the insubstantial difference test has been criticized, with some justice in my view, as offering little guidance. *Id.* at 39-40; see *Dawn Equip. Co. v. Kentucky Farms Inc.*, 140 F.3d 1009, 1016 (Fed. Cir. 1998). But the particular linguistic framework is less important than the court’s analysis of individual elements in the context of the specific patent claim. *Id.* at 40. To give structure to the analysis, and given the mechanical nature of the patent, I will use the function-way-result framework.

For the function-way-result analysis, “[a] ‘substantial equivalent’ may be found in the accused device ... if it performs substantially the *same function* in substantially the *same way* to achieve substantially the *same result*.” *Wolverine World Wide, Inc. v. Nike, Inc.*, 38 F.3d 1192, 1196 (Fed. Cir. 1994) (emphasis added) (citing *Corning Glass Works v. Sumitomo Elec. U.S.A. Inc.*, 868 F.2d 1251, 1260 (Fed. Cir. 1989)). “That a claimed invention and an accused device may perform substantially the same function and may achieve the same result will not make the latter an infringement under the doctrine of equivalents where it performs the function and achieves the result in a substantially different way.” *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1532 n.6 (Fed. Cir. 1987).

Plaintiffs must present evidence of equivalence under each prong of the

function-way-result test. *Advanced Steel Recovery, LLC v. X-Body Equip.*, 808 F.3d 1313, 1320 (Fed. Cir. 2015). Specifically, they must demonstrate how the accused device's sawtooth and spring flap configuration performs substantially the same function, in substantially the same way, to get substantially the same result as the knob and hole arrangement.

That is a factual question. Employing a summary judgment standard, I may find non-infringement only if no reasonable juror could find the configurations equivalent. I will analyze function, way, and result separately.

(1) Function: Plaintiffs' knob and hole configuration has two functions: First (when unscrewed) it enables the bracket to be moved—up and down and side to side. ('953 Patent 6:19-21). Second (when screwed down) it provides for “fastening into place” the lower bracket.

As for “movement,” Merkury argues that its sawtooth and spring flap arrangement does not serve the same function because it provides only for lateral movement, whereas the knob and hole configuration provides for both lateral and vertical movement. (Def. Br. 17). Both of the configurations provide for movement. The direction of the movement is not mentioned in the claim language and was not added at the claim construction stage. I therefore find that the question of lateral vs. vertical movement, viewed in isolation, presents a factual issue.

“Fastening” (although of course related to movement) I consider separately. The knob and hole arrangement can screw down the lower bracket in one static position; the sawtooth and spring flap arrangement always allows the lower bracket to click back and forth with minimal effort. Still, I find a factual issue as to whether the two configurations serve substantially the same function.

(2) Way: The way Plaintiffs' knob and hole configuration works is by permitting a user to “open” or “close” the knob, *i.e.*, to screw it down tightly or unscrew it. “Depending on the open or close[d] state of the knob 92, the bracket 70 may be moved or fixed.” ('953 Patent 3:66-67 (bracketed material

inserted)). Merkury's configuration works by permitting a user to slide the lower bracket laterally. It does not allow a user to fasten, fix, or firmly hold the lower bracket in place. The sawtooth and spring flap assembly builds in some resistance to the motion of the lower bracket. There is no device or mechanism, however, for firmly fixing or holding it in place.

The knob and hole assembly permits a user to fasten the lower bracket in one position, where it will remain until the user opens the knob again. Plaintiffs posit that the knob and hole configuration "enables movement if a certain frictional force is overcome ... [or] stays *fixed* if any force applied is not enough to overcome the friction force." (Pl. Br. 25). That misses the point. The claim language does not refer to "friction force." The knob and hole configuration is not designed to resist or slow down the movement of the lower bracket; rather, the knob and hole configuration is designed to "fix" the lower bracket into place so it cannot be moved unless and until the user unscrews the knob. This works in a different way than the sawtooth and spring flap, which is not designed to firmly "fix" the lower bracket in place at all, and which employs a different mechanism. Fundamentally, the way the knob "fixes" the lower bracket is with a knob, screw, and nut. The sawtooth and spring flap configuration is not a screw; it employs a jagged surface. The two configurations thus do not perform their functions in substantially the same way.⁵

⁵ Of course, there is a trivial sense in which we could argue that both rely on friction. Indeed, even the sturdiest means of fastening – nailing two boards together, bolting two metal parts together – employ friction. Still, the word "fixed" has, if you will, a fixed meaning; it refers to a thing's being held in place, not to the resistance or rubbing experienced as it moves. The difference is between applying the brakes and booting a car for nonpayment of parking tickets.

I do not accept plaintiffs' argument that the difference is simply one of degree. I suppose that no object can be regarded as absolutely "fixed" in relation to every possible application of force. A sledge hammer, for example, could surely render any part of Merkury's device movable. But again, this is an objection that proves too much; it would not allow for the use of the term "fixed" or "fastened" at all. When the Merkury device's lower bracket is fixed in place, it is screwed down; the obvious intent

(3) Result: The result of the knob and hole assembly is that the lower bracket can be “fixed” or “moved” so that “various types of portable devices may be held regardless of the lengths of the portable devices” (’953 Patent 6:19-21), and “an external connection cable of the portable device may be passed” through the opened portion of the lower bracket (’953 Patent 3:30-34). While Merkury’s configuration does not firmly “fix” the lower bracket or allow for vertical movement, it can be positioned laterally to accommodate various types of portable devices with different external cable connections. The similarity of result, then, I adjudge to be at best a factual question.

* * *

Ultimately, for an accused product to infringe upon a patented product under the doctrine of equivalents, it must perform substantially the same function, in substantially the same way, to get substantially the same result. Although there is potentially a factual issue as to function and result, I find the evidence conclusive that Merkury’s product does not perform in substantially the same way.

Employing a summary judgment standard, I find that Merkury’s product would not infringe under the doctrine of equivalents. Accordingly, the issue of whether plaintiffs are estopped from asserting the doctrine of equivalents is moot.

B. “[T]he portable device”

i. Claim Construction

Again, at the first stage of the patent-infringement analysis, I must properly construe the claims. The plaintiffs say that “the portable device” is a required element of claim 1; Merkury says it is not.

Claim 1 provides, in relevant part:

1. A holder for a portable device, comprising:

is that it should not move under normal stresses. Immovable objects, like irresistible forces, belong to the realm of paradox, not patent law.

a main body *having the portable device received on a front surface portion* thereof;

a first switch formed at a designated position on the front surface portion of the main body so as to be pushed into and protruded from the front surface portion;

first and second arms formed at both side surfaces of the main body, and having a distance provided therebetween and varied by the first switch such that *the portable device* is attached or detached

(’953 Patent 6:56-65). Merkury contends that a portable device is required for there to be infringement. Accordingly, because Merkury does not sell a portable device with its products, no reasonable juror could find direct infringement either literally or under the doctrine of equivalents. (Def. Br. 19-20).

Merkury identifies intrinsic evidence to support its claim that “the portable device” is a required element of claim 1. (AJCC 3). Merkury argues that the claim language makes “the portable device” a required element so that Merkury’s device, sold without a portable device (such as a cell phone), does not infringe upon the ’953 patent. (AJCC 3); *see* (’953 Patent 6:56-58, 6:62-65).

Plaintiffs disagree. They argue that claim 1 does not require a “portable device” to directly infringe. (Pl. Br. 15-18). Plaintiffs’ patent is for a portable device holder, not a holder with a portable device. Additionally, plaintiffs take Merkury’s argument and run with it. If claim 1 is construed to require a portable device, they say, then Merkury has engaged in active inducement and contributory infringement by instructing users to use its product with a portable device. (*Id.*).⁶

Plaintiffs provide several pieces of intrinsic evidence in support of their claim construction argument. First, the language in the claim refers to a holder

⁶ On April 18, 2017, plaintiffs sought to amend its infringement contentions to include active inducement of infringement and contributory inducement of infringement. (ECF no. 51); (Pl. Br. 18). This request was granted on July 25, 2017 and plaintiffs’ amended infringement contentions were deemed served on July 27, 2017. (ECF no. 69); (AJCC 6).

for a portable device, which suggests that the portable device is not part of the invention. The preamble of claim 1 describes “[a] holder for a portable device.” (’953 Patent 6:56). The title of the patent-at-issue is a “holder for portable device.” (’953 Patent). The “Summary of the Invention” refers to “a holder for mounting and detaching a portable device” and “a holder for stably holding a portable device.” (’953 Patent 1:49-53). Additionally, there are many references to the device as a “holder for a portable device” in the description of specific embodiments. (’953 Patent 2:31-32, 3:18-20).

Second, plaintiffs argue that “the portable device” is not “positively” recited as an element in claim 1 in accordance with 35 U.S.C. § 112, which provides that a patent specification must conclude with claims “particularly pointing out and distinctly claiming the subject matter which the invention or joint inventor regards as the invention.” (AJCC 2).

Evaluating whether a portable device is a required element of the ’953 patent involves examining the grammar and syntax of the patent. “A [claim’s] proper construction must be discerned by examining the language of the [claim] as a whole. In determining the true meaning of the language of the [claim], the grammatical structure and syntax thereof may be instructive.” *Credle v. Bond*, 25 F.3d 1566, 1571 (Fed. Cir. 1994); *see also Otsuka Pharm. Co. v. Torrent Pharm. Ltd., Inc.*, 99 F. Supp. 3d 461, 479 (D.N.J. 2015).

The critical language is “a main body having *the portable device* received on a front surface portion thereof.” “Having . . .” I read as a modifying phrase that specifies a location. Its purpose is to state that the holder is one that receives the portable device in front, to distinguish it from, say, a device where it would slide in from the side. I do not read it to be claiming, for example, the technology of an iPhone that might be placed in the holder. Such a reading is strained and implausible.

The patent is repeatedly described as a holder *for* “the portable device” or “a portable device.” The portable device is not described as part of the invention, but something that can be used with the invention. The device is no

more a part of the patent than a golf club shaft (or a golfer) is part of the patent for a golf club head, even if the patent describes how the club is to be held or swung. *See generally Irrevocable Tr. of Anthony J. Antonious v. Nike, Inc.*, No. 11-cv-6327, 2014 WL 69156 (D.N.J. Jan. 8, 2014) (McNulty, J.).

The Federal Circuit's reasoning in *DeGeorge v. Bernier* helps to clarify this claim construction analysis. 768 F.2d 1318, 1322 (Fed. Cir. 1985). The patent-at-issue in *Bernier* was for electrical circuitry in word processors (or typewriters). The circuitry accomplished automatic indentation of a block (or paragraph) of text so that subsequent lines of the block (or paragraph) are indented from the left line regardless of the recorded codes for subsequent lines. *Id.* at 1320. The patent was specifically for the electrical circuitry, but was used with word processors. The parties disputed whether claim 1 included a word processor in addition to the circuit. *Id.* at 1322. Claim 1 read, in relevant part,

Apparatus for controlling the operation of a data processing system printer having printing mechanism for printing characters and functional mechanism for selecting the location of printing of characters

Id. at 1320. The court acknowledged that the claim was "arguably ambiguous with respect to whether it includes a word processor (or typewriter) in addition to the [circuit]." *Id.* at 1322. As the court explained,

"Comprising" is often used after a claim preamble to introduce elements of the invention. If "having" is viewed as a substitute for "comprising", the "printing mechanism ... of characters," *i.e.*, word processor, might be viewed as an element of the claimed invention, not as part of the preamble. If, however, "having" is viewed as a participle combined with "printing mechanism ... of characters", it would be an adjective phrase in the claim preamble modifying "data processing system printer", and the word processor would not be part of the claimed invention.

Id. at 1322. Second, noting that the claim language could be interpreted in different ways, the Federal Circuit looked to the patent's specification to determine if the word processor was part of the patent and claim:

Resort to the '193 patent specification resolves the ambiguity, compelling the broader reading of the copied claim, *i.e.*, without the word processor. The patent does not show or describe in reasonable detail any kind of printer, or data recording or playback mechanism with which the [circuit] feature may be used. The various electrical signals used as input signals to the [...] circuitry disclosed in the patent are received from a word processor with which the circuit is used. The circuitry for generating these signals resides in the word processor and is not described in the Bernier '193 patent except for a brief reference to it as being in a copending patent application.

Id. Essentially, the patent specification did not describe or show the word processor in detail. The specification merely clarified that the circuitry worked with a word processor.

“The portable device” in this case is like the word processor in *Bernier*—it is not a requisite element of the patent, and its description is absent from the patent, even though the patent is intended to be used in conjunction with it. Reading the '953 patent's specification resolves any possible lingering ambiguity. The specification does not “show or describe in reasonable detail” any kind of portable device. *See Bernier*, 768 F.2d at 1322. The patent does not specify the mechanics of the portable device, or even specify a kind of portable device. The '953 patent describes a holder *for* a portable phone, not a holder *with* a portable phone.

Therefore, I construe “the portable device” as not being a required element of claim 1.

ii. Claim Comparison

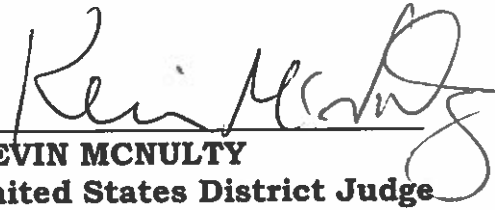
At the second step of the patent-infringement analysis, the properly construed claims are compared to the allegedly infringing product. I have determined that “the portable device” is not a required element of the '953 patent. It follows that selling the holder with a portable device would not constitute infringement, and selling it without a portable device would not establish non-infringement. It is irrelevant.

IV. CONCLUSION

For the foregoing reasons, I GRANT defendant Merkury's motion for summary judgment of non-infringement.

An appropriate order accompanies this opinion.

Dated: December 29, 2017


KEVIN MCNULTY
United States District Judge